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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/830,158	04/22/2004	Jae Hee Kim	F-8227	8119

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EXAMINER

LUPINO, GINA M

ART UNIT PAPER NUMBER

3652

DATE MAILED: 11/22/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/830,158

Applicant(s)

KIM ET AL.

Examiner

Gina M. Lupino

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 September 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 and 2 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 and 2 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to: See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

I. Drawings

1. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include reference character "11", which is not mentioned in the description. Appropriate correction is required.
2. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

II. Claim Objections

1. Claims 1 and 2 are objected to because it recites the limitations:
 - 1.1. "the pallet". However, there is no preceding reference to "a pallet" in claim 1.
 - 1.2. "the green tire". However, there is no preceding reference to "a green tire" in claim 1.
 - 1.3. Therefore, there is insufficient antecedent basis for these limitations in the claim.
2. Claim 2 is objected to because it recites the limitation "said four corners". However, there is no preceding reference to "four corners" in claims 2 or 1. Therefore, there is insufficient antecedent basis for this limitation in the claim.
3. Claims 1-2 are objected to because they include reference characters that are not enclosed within parentheses. Reference characters corresponding to elements recited in the detailed description of the drawings and used in conjunction with the recitation of the same element

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or group of elements in the claims should be enclosed within parentheses so as to avoid confusion with other numbers or characters which may appear in the claims. See MPEP § 608.01(m).

III. Claim Rejections - 35 USC § 112

The following is a quotation from the relevant paragraphs of 35 U.S.C. 112:

(2) The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

1. Claim 2 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 2 recites the limitations:

1.1. "upper surface thereof". However it is unclear whether this refers to the upper surface of the "upper cap" or the upper surface of the "post".

1.2. ""so as to use". However it is unclear whether the "post" or solely the "upper cap" on the post is being used.

1.3. Further clarification is necessary.

IV. Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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1. Claims 1 is rejected under 35 U.S.C. 102(b) as being anticipated by ARNTZEN (U.S. Patent Publication No. 2002/0197135).

1.1. With respect to claim 1, claim 1 discloses an automated system for storing a pallet 18 that is capable of loading a green tire, taking said pallet into a warehouse and taking said pallet out of the warehouse comprising:

1.1(a) a conveyor section 38b for taking the pallet, on which the green tire subjected to a forming process may be loaded, into the warehouse;

1.1(b) a gantry robot section 16, 26 for transferring said pallet to be taken out of the warehouse to a conveyor section 36b for taking the pallet out of the warehouse when the pallet is taken out of the warehouse while the warehoused pallet is transferred to a location on which the warehoused pallet is stacked 64 and stored;

1.1(c) and a conveyor section 36b for taking the pallet out of the warehouse by said gantry robot, in which the above gantry robot is operated in the directions of X axis, Y axis and Z axis, so that said pallet is selectively transferred and positioned.

1.1(d) See Figures 1A, 2, 4A, and paragraph 57, lines 5-9.

V. Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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1. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over ARNTZEN (U.S. Patent Publication No. 2002/0197135) in view of NICHOLS (U.S. Patent No. 3,807,581).

1.1. With respect to claim 2, claim 2 discloses the automated system, as discussed above, with stacked pallets 18.

1.2. However, ARNTZEN fails to teach

1.2(a) said pallets each have handles provided at posts mounted vertically onto the four comers of a base frame so as to handle the pallet when the gantry robot is moved in the direction of Z axis;

1.2(b) and each post has an upper cap mounted onto the upper surface thereof so as to use when the pallets are stacked in multi layers.

1.3. NICHOLS teaches a pallet 10 with handles 20 provided along posts 12 mounted vertically onto the four comers of a base frame 14, where each post 12 has an upper cap 26 mounted onto the upper surface thereof so as to use when the pallets are stacked in multi layers. See Figures 1-2.

1.3(a) Therefore, it would have been obvious to one of ordinary skill in the art to modify ARNTZEN with the pallets of NICHOLS in order to facilitate pallet handling when the gantry robot moves in Z-axis direction to stack the pallets in multiple layers.

VI. Conclusion

1. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

2. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gina M. Lupino whose telephone number is (571) 272-6557. The examiner can normally be reached on 8:30am - 5:00pm EST.

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3. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eileen D. Lillis can be reached on (571) 272-6928. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.
4. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

5. GML



EILEEN D. LILLIS
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